

A LOW COST BATTERY POWERED BLACKLIGHT TRAP^{1, 2}Eli Levine³, Leland Chandler

ABSTRACT: The construction of a low cost battery powered blacklight trap is described.

DESCRIPTORS: BL Trap, Insect Trap, Trap

In conjunction with studies on the biology of *Bellura gortynoides* Walker (Lepidoptera: Noctuidae), a low cost battery powered BL trap was needed to monitor emergence of these moths. A battery powered unit was necessary since the research area was located 3/4 mile from the nearest source of line current. A 6-W omnidirectional trap developed jointly by the USDA and Purdue University (Hollingsworth et al. 1963) to run on household current was modified to accept a 15-W BL tube (Type F15T8/BL) and to run on 12 VDC from a car battery. A transistorized 15-W recreational vehicle fluorescent fixture⁴ with its plastic shield, lamp, and lampholders removed was inverted and mounted on the baffle (Fig. 1). The lampholders were also remounted on the baffle to accommodate the lamp. The wiring of the trap is the same as that of the original fixture. For convenience, a long power cord with color coded battery clips may be connected to the circuit board in the fixture.

The trap draws only 1 ampere/hour and can be expected to run continuously for at least 2 days in the field between battery rechargings.

The fluorescent fixture may be obtained for less than \$16 and the trap itself can be made from several dollars worth of sheet metal and furnace pipe.

⁴ Available from J.C. Whitney and Co., P.O. Box 8410, Chicago, Illinois 60680, as stock number 12-1776P. Mention of a proprietary product does not constitute recommendation or endorsement by Purdue University.

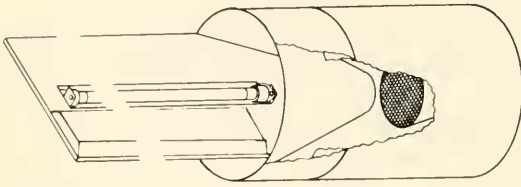
REFERENCE CITED

Hollingsworth, J.P., J.G. Hartsock, and J.M. Stanley. 1963. Electric insect traps for survey purposes. U.S. Dept. of Agr., Agr. Res. Serv. ARS 42-3-1.

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NOTES

- 1 MATERIAL 26 GAUGE GALVANIZED STEEL
- 2 CAN MADE FROM TWO SECTIONS OF 8" INCH FURNACE PIPE CONNECTED BY SLIP JOINT
- SOLDER UPPER CONE TO TOP SECTION AND BOTTOM WITH DRAIN TO LOWER SECTION

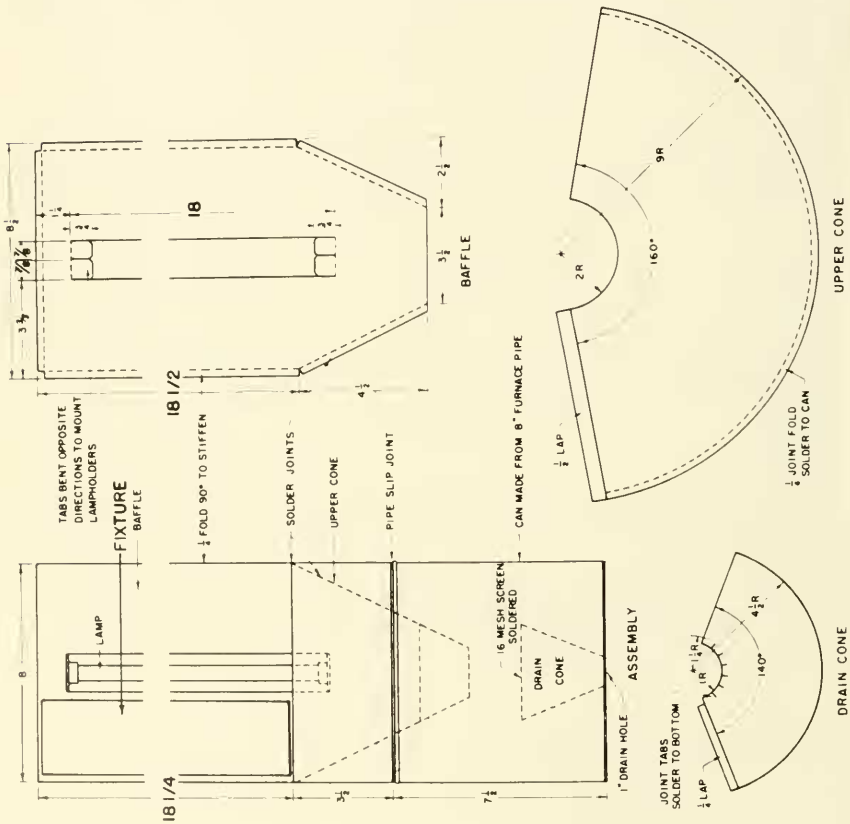


Figure 1. Modified USDA-Purdue blacklight construction plans. (After Hollisworth).